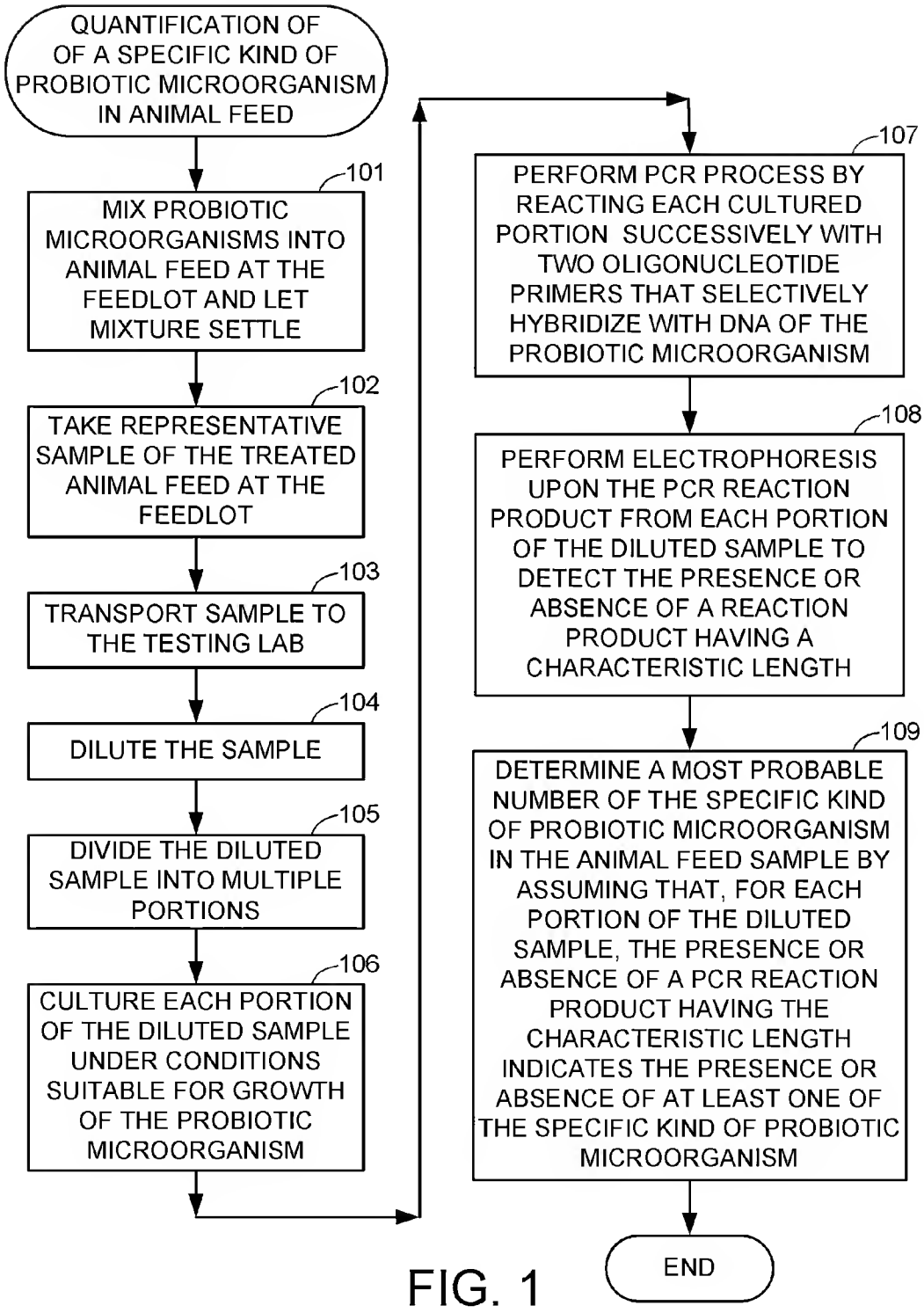
QUANTIFICATION OF OF A SPECIFIC KIND OF PROBIOTIC MICROORGANISM IN ANIMAL FEED
101
MIX PROBIOTIC MICROORGANISMS INTO ANIMAL FEED AT THE FEEDLOT AND LET MIXTURE SETTLE
102
TAKE REPRESENTATIVE SAMPLE OF THE TREATED ANIMAL FEED AT THE FEEDLOT
103
TRANSPORT SAMPLE TO THE TESTING LAB
104
DILUTE THE SAMPLE
105
DIVIDE THE DILUTED SAMPLE INTO MULTIPLE PORTIONS
106
CULTURE EACH PORTION OF THE DILUTED SAMPLE UNDER CONDITIONS SUITABLE FOR GROWTH OF THE PROBIOTIC MICROORGANISM
107
PERFORM PCR PROCESS BY REACTING EACH CULTURED PORTION SUCCESSIVELY WITH TWO OLIGONUCLEOTIDE PRIMERS THAT SELECTIVELY HYBRIDIZE WITH DNA OF THE PROBIOTIC MICROORGANISM
108
PERFORM ELECTROPHORESIS UPON THE PCR REACTION PRODUCT FROM EACH PORTION OF THE DILUTED SAMPLE TO DETECT THE PRESENCE OR ABSENCE OF A REACTION PRODUCT HAVING A CHARACTERISTIC LENGTH
109
DETERMINE A MOST PROBABLE NUMBER OF THE SPECIFIC KIND OF PROBIOTIC MICROORGANISM IN THE ANIMAL FEED SAMPLE BY ASSUMING THAT, FOR EACH PORTION OF THE DILUTED SAMPLE, THE PRESENCE OR ABSENCE OF A PCR REACTION PRODUCT HAVING THE CHARACTERISTIC LENGTH INDICATES THE PRESENCE OR ABSENCE OF AT LEAST ONE OF THE SPECIFIC KIND OF PROBIOTIC MICROORGANISM
END

FIG. 1